



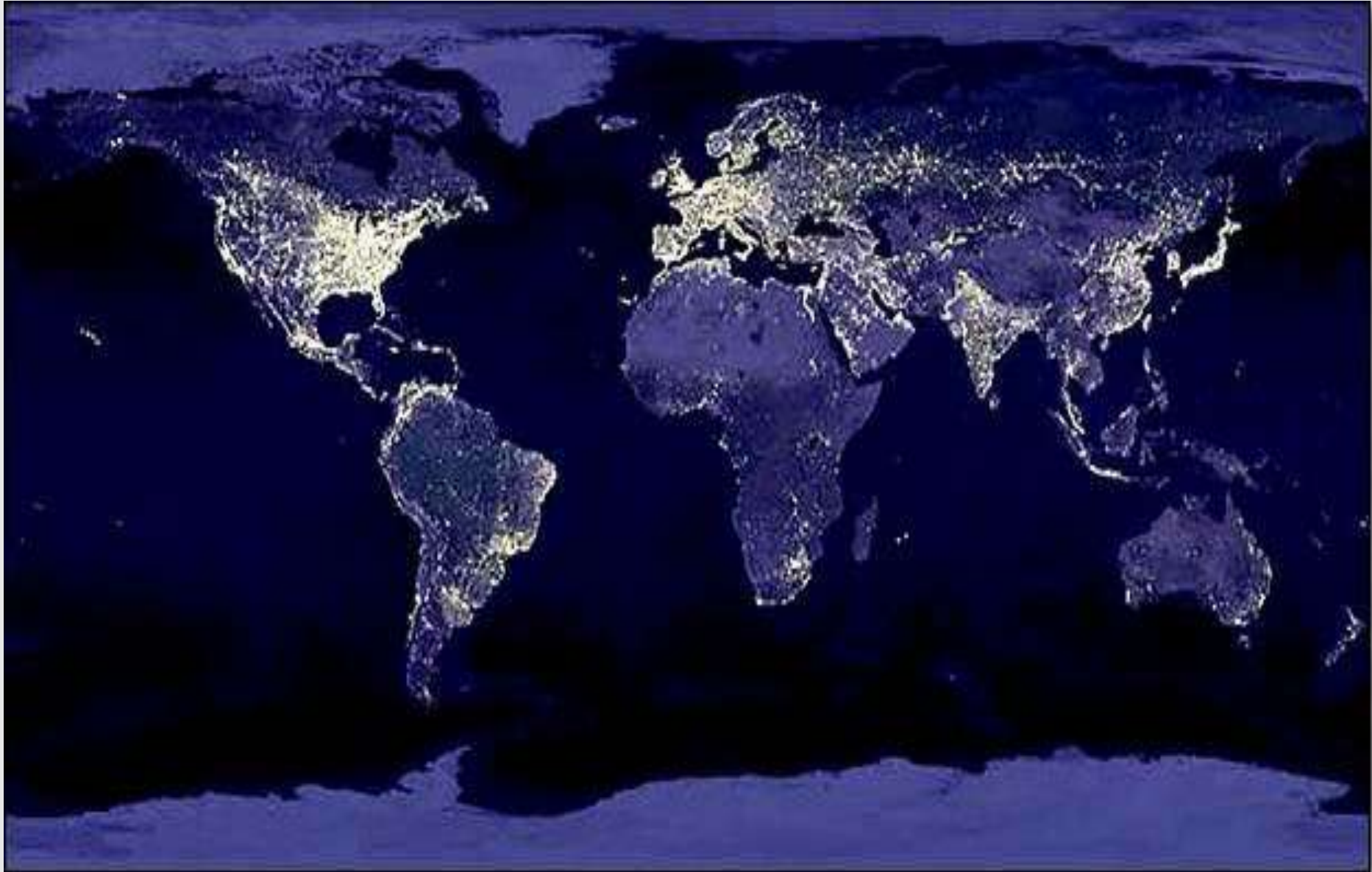
California at the Launch of a New Industry

Terri Pollino, AeroVironment, Inc., EV Solutions



"Energy is the single most important problem facing humanity today... We need to somehow provide clean, abundant, low-cost energy throughout the world to the 6 billion people that live on the planet today, and the 10+ billion that are expected by the middle of this century."

- Richard E. Smalley, Nobel Laureate



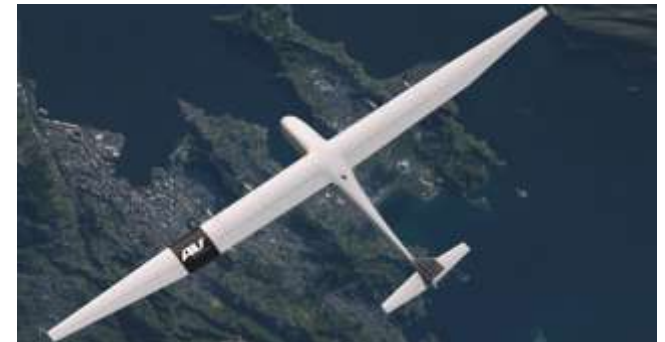
Agenda

- AV Background & Overview
- EV Charging Basics
- Home EVSE Installation Process
- Customer Support Program
- Evolution of EV Infrastructure

AeroVironment & Innovation

Clean Transportation Experts for 40 Years

- California based AV develops, manufactures, and markets Efficient Energy technologies and Unmanned Aircraft Systems
- NASDAQ: AVAV
AV focuses on the development and commercialization of innovative technologies
- A unique record of achievement
 - Industrial PosiCharge™, market-leading industrial EV fast charging – over 14,000 systems delivered
 - Pioneer and market leader in small unmanned aircraft systems – over 15,000 air vehicles delivered
 - Leading provider of testing and simulation systems to EV, PHEV, and advanced battery and fuel cell developers
 - Global Observer, first liquid-hydrogen powered unmanned aircraft system
 - Conceived and developed the GM Impact, the first modern EV



Driving the Broad Adoption of EVs with Innovative Solutions



Over two decades of EV expertise

1989



The first modern EV



"Gen 1"
Public EV Chargers



EV Testing and Simulation



Industrial EV Charging



Fleet EV Solutions

2011



"Gen 2"
Public EV Fast Chargers

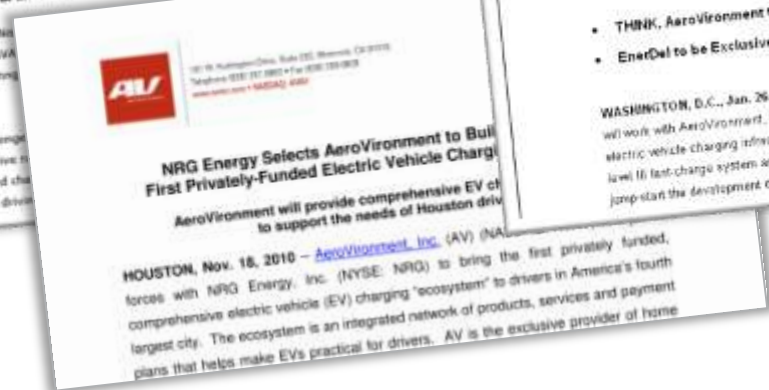


Home Charging Solutions



systems integration

Recognition of Two Decades of Commitment AV in the News...



Frost & Sullivan EV Charging Station Customer Service Leadership

Deloitte Technology Fast 500™

Forbes 200 Best Small Companies

Automotive News PACE Award

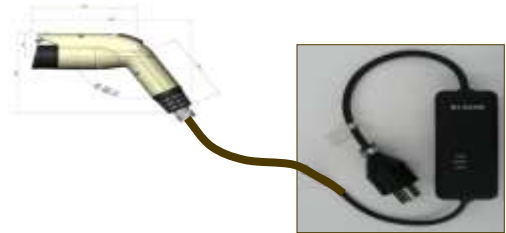
Fortune Magazine "Cool Company"

The Basics: Charging Method Primer

EVSE is Just One of Three Ways to Charge: Safe, Reliable, Simple

Level 1 Charging - Trickle

- Portable “plug” for the home
- 120 AC-15A standard outlet
- Delivers power from the wall to the on-board charger
- Time from fully depleted to fully charged: 18 hours



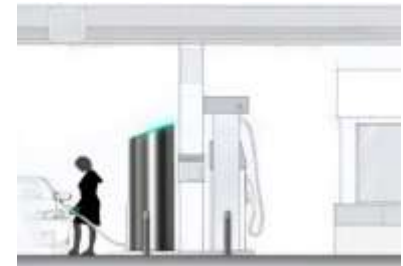
Level 2 Charging – EVSE Charging

- Fixed EVSE charging station for the home (and public)
- 240V AC 30A fixed installation
- Delivers power from the wall to the EV's on-board charger
- Time from fully depleted to fully charged: 8 hours
- Accommodate today's 3.3kW and future 6.6kW on-board charger



Level 3 Charging or DC Fast Charging

- DC fast-charge station for the public (“gas pump”)
- 480V AC
- Delivers DC energy, bypassing the on-board charger
- Time to fully charge 10 – 30 minutes



The Basics: SAE J-1772 Connector

Automotive Standard for All New Electric Vehicles

- Connector for Level 1 and Level 2



BMW Active E



Chevy Volt



Nissan LEAF



Mitsubishi iMiev



Electric Ford Focus

Example of some of the many model EVs debuting over the next year

The EVSE Hardware

Application Breadth, Functionality Depth



Home Charging Solutions

Public Charging Solutions

EVSE-RS

Base EVSE configuration
Wall or pedestal mount
Indoor or outdoor
Single-phase up to 30A
Smart module option

EVSE-ES

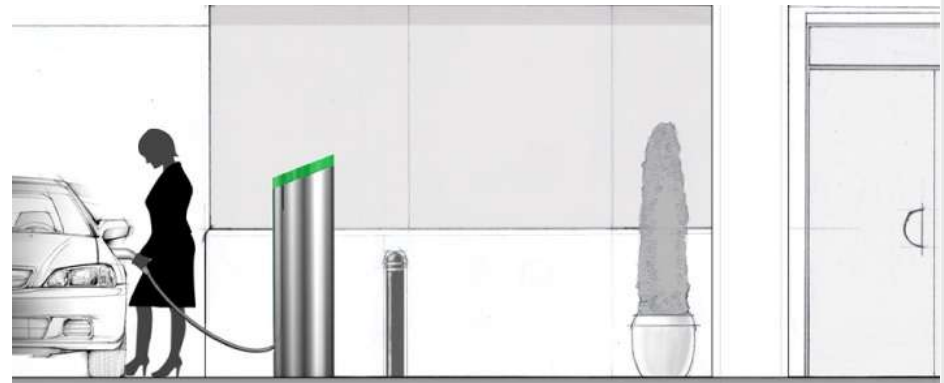
With the IEC16296 inlet,
Mode 3, Type 2 (Mennekes).
Wall or pedestal mount
Indoor or outdoor
Smart module option

EVSE-Multi

Dual configuration
Quad configuration
All functionality of RS
Reduced install cost
Weather resistant

EVSE-CS

Commercial outdoor
Fleets and public charging
POS and cord security
Adaptable 3-phase input
Comm options



Infrastructure and Network Services

Providing Data and IT-Driven Solutions

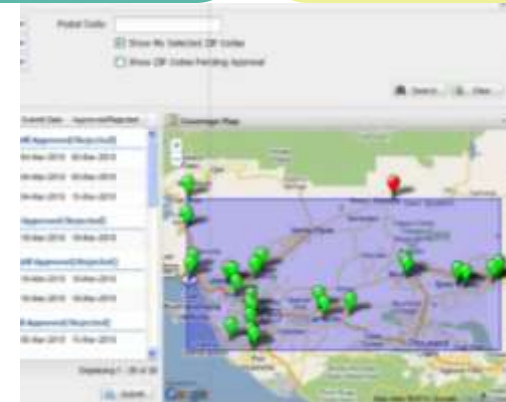


EV Data
Communications links and
Back end systems that
Provide Portal and mobile
Access to Charger Data.

Utility Integration
Demonstrated Integration
with Utilities Advanced
Metering and Energy
Mgmt Platforms with open,
Standards-based options.

CRM Backend
Robust CRM System ready
for OEM integration,
utilizing EV owner,
Installer, and OEM touch
points to ensure complete
customer satisfaction.

ERP System
3PL, IT backend, and in-
field tools able to provide
information & traceability
at all stages of product
and service fulfillment.



AV Installation Services Overview

End-to-End Support

■ The Team

- Experienced and exclusive installers/service providers
- Comprehensive national coverage
- Licensed and insured electricians
- Local codes/permitting knowledge
- Fully trained and certified

■ The Installation Services

- Real time/Web based scheduling and payment
- Site assessments and application services
- Service upgrades (trenching, panel upgrades)
- Turn-key installation
- On-site user training

■ The Post Installation Services

- 24/7 call center and help desk support
- On-site troubleshooting
- Proprietary vehicle simulation tool for test and troubleshooting

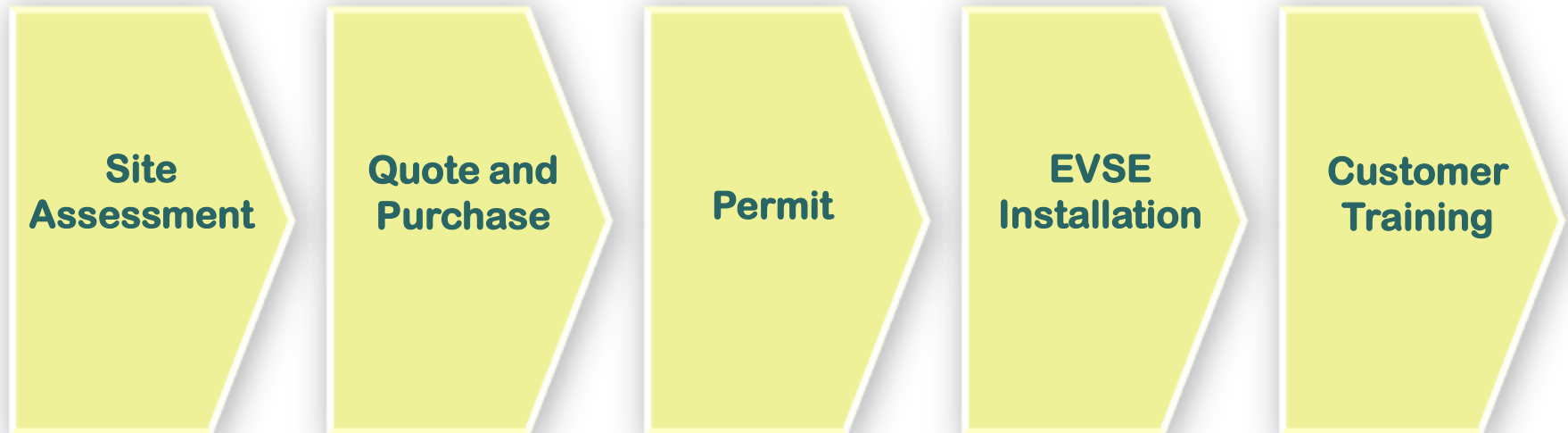


The Residential EVSE Installation Process

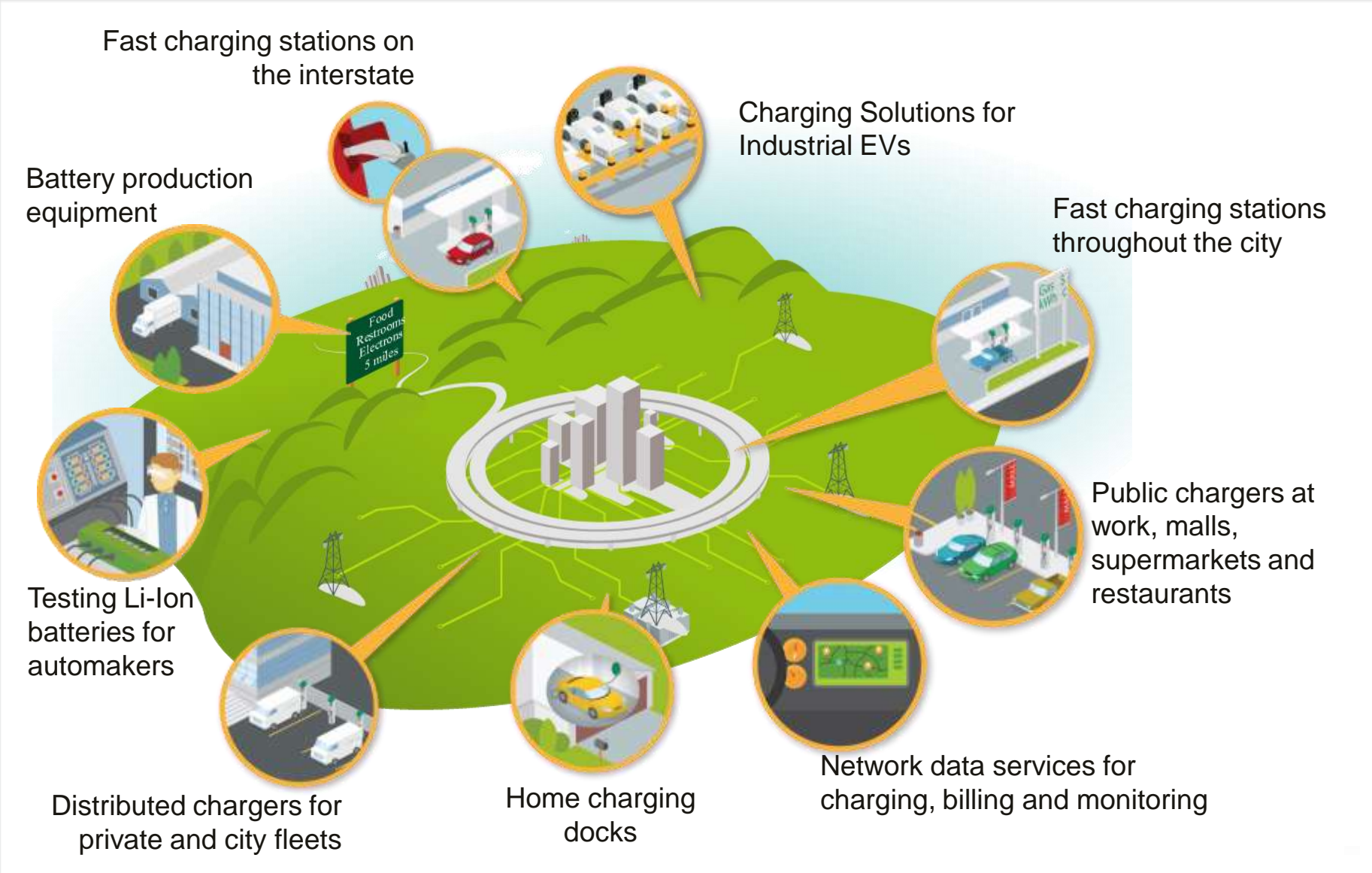
Seamless User Experience



AV provides our customers with “hassle free” 3- year on-site warranty and professional, experienced installation supported by AV customer hotline services 24/7



EV Ecosystem – A Look Into The Future



Public and Private Infrastructure Installations

Underway Across the Country

- AV installations
 - Level 2 Charging Docks (residential and commercial)
 - Nissan LEAF Dealerships
 - VIPs and Celebrities
 - States from Maui to Maryland



Questions



Thank you

AeroVironment, Inc.

Monrovia, CA, USA

Terri Pollino

1.626.357.9983

pollino@avinc.com

